

CURRENT LISTING OF CLAIMS

No amendments are presented herein. However, to facilitate review of this Response, the Applicant provides the following listing of claims in the present application.

By way of overview, claims 1-12, 15, 17-36, and 38-49 are currently pending. The status of all of the claims is indicated below:

- a) Claims 1-12, 15, 17-28, and 30-36 are original;
- b) Claims 29 and 38-49 were previously presented; and
- c) Claims 13, 14, 16, and 37 are canceled without prejudice or disclaimer.

Listing of Claims

1. (Original) A method for mapping between parts of an input document and associated parts of an output document, the input document pertaining to a first kind of document, and the output document pertaining to a second kind of document, comprising:

providing a translation file that converts documents of the first kind to documents of the second kind;

in a first phase, modifying the translation file to include mapping functionality that can provide information regarding relationships between parts of documents of the first kind and associated parts of documents of the second kind, the first phase producing a modified translation file;

in a second phase, using the modified translation file to convert the input document into the output document, including:

activating the mapping functionality; and

1 using the mapping functionality to provide references in the output
2 document that associate parts of the output document with parts of the input
3 document.

4
5 2. (Original) The method according to claim 1, where the first kind of document is
6 a markup language document that uses tags pertaining to subject matter fields in the input
7 document.

8
9 3. (Original) The method according to claim 2, wherein the first kind of document
10 is expressed in the extensible markup language (XML).

11
12 4. (Original) The method according to claim 1, wherein the second kind of
13 document is a markup language document that uses tags pertaining to visual features in
14 the output document.

15
16 5. (Original) The method according to claim 4, wherein the second kind of
17 document is expressed in hypertext markup language (HTML).

18
19 6. (Original) The method according to claim 1, wherein the output document
20 comprises an electronic form having at least one data entry field therein, wherein the data
21 entry field is mapped to a corresponding part of the input document via at least one
22 reference.

23
24 7. (Original) The method according to claim 6, further comprising:
25

1 receiving information input by a user into the data entry field; and
2 modifying the corresponding part of the input document pointed to by the at least
3 one reference in response to the receiving.

4
5 8. (Original) The method according to claim 1, wherein the translation file is
6 expressed in the extensible stylesheet language (XSL).

7
8 9. (Original) The method according to claim 8, wherein the modifying of the
9 translation file includes adding extension functions to the translation file expressed in the
10 extensible stylesheet language (XSL).

11
12 10. (Original) The method according to claim 9, wherein the activating of the
13 mapping functionality includes calling the extension functions to return the references
14 that associate parts of the output document with parts of the input document.

15
16 11. (Original) The method according to claim 1, wherein the modifying of the
17 translation file in the first phase includes adding the mapping functionality at locations in
18 the translation file that mark context changes in the output document.

19
20 12. (Original) The method according to claim 1, wherein the modifying of the
21 translation file in the first phase includes adding the mapping functionality at locations in
22 the translation file that mark data items contained in the input document that are to be
23 bound to corresponding parts in the output document.

1 13. (Canceled).

2
3 14. (Canceled).

4
5 15. (Original) A method for generating mapping functionality that can map
6 between parts of an input document and associated parts of an output document, the input
7 document pertaining to a first kind of document, and the output document pertaining to a
8 second kind of document, comprising:

9 providing a translation file that converts documents of the first kind to documents
10 of the second kind; and

11 modifying the translation file to include mapping functionality that can provide
12 information regarding relationships between parts of documents of the first kind and
13 associated parts of documents of the second kind.

14
15 16. (Canceled).

16
17 17. (Original) An apparatus for mapping between parts of an input document and
18 associated parts of an output document, the input document pertaining to a first kind of
19 document, and the output document pertaining to a second kind of document, and further
20 wherein a translation file converts documents of the first kind to documents of the second
21 kind, the apparatus comprising:

22 annotation logic configured to modify the translation file to include mapping
23 functionality that can provide information regarding relationships between parts of
24
25

documents of the first kind and associated parts of documents of the second kind, to
thereby provide a modified translation file;

a storage for receiving the modified translation file;

runtime logic configured to convert the input document into the output document
using the modified translation file in the storage, including:

activation logic configured to activate the mapping functionality; and

output logic configured to use the activated mapping functionality to
provide references in the output document that associate parts of the output
document with parts of the input document.

18. (Original) The apparatus according to claim 17, where the first kind of
document is a markup language document that uses tags pertaining to subject matter
fields in the input document.

19. (Original) The apparatus according to claim 18, wherein the first kind of
document is expressed in the extensible markup language (XML).

20. (Original) The apparatus according to claim 17, wherein the second kind of
document is a markup language document that uses tags pertaining to visual features in
the output document.

21. (Original) The apparatus according to claim 20, wherein the second kind of
document is expressed in hypertext markup language (HTML).

1 22. (Original) The apparatus according to claim 17, wherein the output document
2 comprises an electronic form having at least one data entry field therein, wherein the data
3 entry field is mapped to a corresponding part of the input document via at least one
4 reference.

5
6 23. (Original) The apparatus according to claim 22, further comprising:
7 receiving logic configured to receive information input by a data into the user
8 entry field; and
9 editing logic configured to modify the corresponding part of the input document
10 pointed to by the at least one reference in response to the receiving.

11
12 24. (Original) The apparatus according to claim 17, wherein the translation file is
13 expressed in the extensible stylesheet language (XSL).

14
15 25. (Original) The apparatus according to claim 24, wherein the annotation logic
16 is configured to modify the translation file by adding extension functions to the
17 translation file expressed in the extensible stylesheet language (XSL).

18
19 26. (Original) The apparatus according to claim 25, wherein the activation logic is
20 configured to activate the mapping functionality by calling the extension functions to
21 return the references that associate parts of the output document with parts of the input
22 document.

1 27. (Original) The apparatus according to claim 17, wherein the annotation logic
2 is configured to modify the translation file in the first phase by adding the mapping
3 functionality at locations in the translation file that mark context changes in the output
4 document.

5
6 28. (Original) The apparatus according to claim 17, wherein the annotation logic
7 is configured to modify the translation file in the first phase by adding the mapping
8 functionality at locations in the translation file that mark data contained in the input
9 document that are to be bound to corresponding parts in the output document.

10
11 29. (Previously presented) A computer readable medium having machine readable
12 instructions for mapping between parts of an input document and associated parts of an
13 output document, the input document pertaining to a first kind of document, and the
14 output document pertaining to a second kind of document, and further wherein a
15 translation file converts documents of the first kind to documents of the second kind, the
16 apparatus comprising:

17 annotation logic configured to modify the translation file to include mapping
18 functionality that can provide information regarding relationships between parts of
19 documents of the first kind and associated parts of documents of the second kind, to
20 thereby provide a modified translation file;

21 a storage for receiving the modified translation file;

22 runtime logic configured to convert the input document into the output document
23 using the modified translation file in the storage, including:

24 activation logic configured to activate the mapping functionality; and
25

1 output logic configured to use the activated mapping functionality to
2 provide references in the output document that associate parts of the output
3 document with parts of the input document.

4
5 30. (Original) An apparatus for providing mapping functionality that maps
6 between parts of an input document and associated parts of an output document, the input
7 document pertaining to a first kind of document, and the output document pertaining to a
8 second kind of document, and further wherein a translation file converts documents of the
9 first kind to documents of the second kind, the apparatus comprising:

10 annotation logic configured to modify the translation file to include mapping
11 functionality that can provide information regarding relationships between parts of
12 documents of the first kind and associated parts of documents of the second kind; and
13 a storage for receiving the modified translation file.

14
15 31. (Original) A computer readable medium having stored thereon an information
16 structure, comprising:

17 a plurality of translation elements configured to convert a first kind of document
18 into a second kind of document; and

19 a plurality of functions interspersed amongst the plurality of translation elements,
20 the plurality functions configured to provide a respective plurality of references, wherein
21 the references provide pointers that link parts of the second kind of document with parts
22 of the first kind of document.

1 32. (Original) The computer readable medium of claim 31, wherein a collection of
2 the plurality of functions have respective positions amongst the plurality of translation
3 elements so as to mark context changes in the second kind of document.

4
5 33. (Original) The computer readable medium of claim 31, wherein a collection of
6 the plurality of functions have respective positions amongst the plurality of translation
7 elements so as to mark data contained in the first kind of document that is to be bound
8 with corresponding parts in the second kind of document.

9
10 34. (Original) A computer readable medium having stored thereon an information
11 structure, comprising:

12 a plurality of translation elements configured to convert a first kind of document
13 into a second kind of document; and

14 a plurality of references interspersed amongst the plurality of translation elements,
15 wherein the plurality of references provide pointers that link respective parts of the
16 second kind of document with parts of the first kind of document.

17
18 35. (Original) The computer readable medium of claim 34, wherein a collection of
19 the plurality of references have respective positions amongst the plurality of translation
20 elements so as to mark context changes in the second kind of document.

21
22 36. (Original) The computer readable medium of claim 34, wherein a collection of
23 the plurality of references have respective positions amongst the plurality of translation
24
25

elements so as to mark data contained in the first kind of document that is to be bound with corresponding parts in the second kind of document.

37. (Canceled).

38. (Previously presented) The method according to claim 1, wherein the translation file is expressed in an arbitrary format.

39. (Previously presented) The method according to claim 1, wherein the modifying is performed in a substantially automatic fashion.

40. (Previously presented) The method according to claim 15, wherein the translation file is expressed in an arbitrary format.

41. (Previously presented) The method according to claim 15, wherein the modifying is performed in a substantially automatic fashion.

42. (Previously presented) The apparatus according to claim 17, wherein the translation file is expressed in an arbitrary format.

43. (Previously presented) The apparatus according to claim 17, wherein the annotation logic is configured to modify the translation file in a substantially automatic fashion.

1 44. (Previously presented) The computer readable medium according to claim 29,
2 wherein the translation file is expressed in an arbitrary format.

3
4 45. (Previously presented) The computer readable medium according to claim 29,
5 wherein the annotation logic is configured to modify the translation file in a substantially
6 automatic fashion.

7
8 46. (Previously presented) The apparatus according to claim 30, wherein the
9 translation file is expressed in an arbitrary format.

10
11 47. (Previously presented) The apparatus according to claim 30, wherein the
12 annotation logic is configured to modify the translation file in a substantially automatic
13 fashion.

14
15 48. (Previously presented) The computer readable medium according to claim 31,
16 wherein the translation elements are expressed in an arbitrary format.

17
18 49. (Previously presented) The computer readable medium according to claim 34,
19 wherein the translation elements are expressed in an arbitrary format.